

CLAIMS

What is claimed is:

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1. A method of wireless communication employing a terminal, the terminal configured to tune either to a HDR carrier or a 1xRTT carrier, the method comprising:

- tuning the terminal to a HDR carrier;
- establishing a packet data communication over the HDR carrier using the terminal; and
- periodically tuning the terminal to a 1xRTT carrier for a limited time in order to check for incoming 1xRTT communications.

2. The method of claim 1, further comprising:

- establishing a 1xRTT communication over the 1xRTT carrier when an incoming 1xRTT communication is detected in step (c); and
- tuning the terminal back to the HDR carrier when the 1xRTT communication is terminated.

3. The method of claim 2, wherein step (d) further comprises:

- sending a 1xRTT packet hand-over request from the terminal to transfer the packet data communication from the HDR carrier to the 1xRTT carrier;
- handing the packet data communication over to the 1xRTT carrier from the HDR carrier; and
- establishing the 1xRTT communication over the 1xRTT carrier, while also maintaining the packet data communication over the 1xRTT carrier.

25 4. The method of claim 3, further comprising:

- tuning the terminal back to the HDR carrier when the 1xRTT communication is terminated;
- sending a 1xRTT packet hand-over request from the terminal to transfer the packet data communication from the 1xRTT carrier to the HDR carrier;

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~~(k) handing the packet data communication over to the HDR carrier from the 1xRTT carrier.~~

5. The method of claim 4, wherein the terminal is configured to optionally establish the 1xRTT communication.

6. The method of claim 5, wherein the 1xRTT communication includes at least one of the following:

- (a) a voice communication;
- (b) a SMS communication; and
- (c) a broadcast information communication.

~~7. A method of wireless communication employing a terminal, the terminal configured to tune either to a HDR carrier or a 1xRTT carrier, the method comprising:~~

~~(a) tuning the terminal to a HDR carrier;~~
~~(b) establishing a packet data communication over the HDR carrier using the terminal;~~
~~(c) while the packet data communication is in progress, tuning the terminal to a 1xRTT carrier; and~~
~~(d) establishing 1xRTT communication on the 1xRTT carrier.~~

8. The method of claim 7, further comprising:

~~(e) tuning the terminal back to the HDR carrier when the 1xRTT communication is terminated in order to complete the packet data communication.~~

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9. The method of claim 7, wherein step (d) further comprises:

~~(f) sending a 1xRTT packet hand-over request from the terminal to transfer the packet data communication from the HDR carrier to the 1xRTT carrier;~~
~~(g) handing the packet data communication over to the 1xRTT carrier from the HDR carrier; and~~

(h) establishing the 1xRTT communication over the 1xRTT carrier, while also maintaining the packet data communication over the 1xRTT carrier.

10. The method of claim 9, further comprising:

(i) tuning the terminal back to the HDR carrier when the voice communication is terminated;

(j) sending a 1xRTT packet hand-over request from the terminal to transfer the packet data communication from the 1xRTT carrier to the HDR carrier;

(k) handing the packet data communication over to the HDR carrier from the 1xRTT carrier.

11. The method of claim 1, wherein the 1xRTT communication is at least one of the following:

(a) a voice communication;

(b) a SMS communication; and

(c) a broadcast information communication.

12. A method of wireless communication employing a terminal, the terminal configured to tune either to a HDR carrier or a 1xRTT carrier, the method comprising:

(a) periodically scanning for a HDR carrier;

(b) tuning the receiver to a 1xRTT carrier;

(c) establishing a packet data communication on the 1xRTT carrier after tuning in step (b);

(d) periodically scanning for a HDR carrier once the terminal is tuned to the 1xRTT carrier;

(e) if a HDR carrier is available, tuning the terminal to the HDR carrier; and

(f) establishing the packet data communication on the HDR carrier.

13. The method of claim 12, wherein the packet data communication on the 1xRTT carrier is terminated prior to step (e).

14. The method of claim 12, wherein step (f) further comprises:

(g) sending a 1xRTT packet hand-over request from the terminal to transfer the packet data communication from the 1xRTT carrier to the second HDR carrier; and

(h) handing the packet data communication over to the second HDR carrier from the 1xRTT carrier.

15. A terminal for wireless communication, comprising:
a transceiver configured to selectively tune to a HDR carrier or to a 1xRTT carrier; and
a processor configured to tune the transceiver to the HDR carrier for establishing packet data communications and to tune the transceiver to the 1xRTT carrier for establishing 1xRTT communications or packet data communications.

16. The terminal of claim 15, wherein the processor is further configured to periodically tune the transceiver to the 1xRTT carrier to check for incoming 1xRTT communications while a packet data communication is occurring over the HDR carrier, and wherein the processor is further configured to tune the terminal to the 1xRTT carrier and establish a 1xRTT communication over the 1xRTT carrier when an incoming 1xRTT communication is detected.

25. 17. The terminal of claim 15, wherein the processor is further configured to tune to a 1xRTT when HDR carriers are unavailable and to periodically scan for HDR carriers until one is available, and wherein the processor is configured to tune to a HDR carrier when one is available.

18. The terminal of claim 15, wherein the processor is further configured to tune to a 1xRTT carrier, while a packet data communication is taking place over a HDR carrier, and establish a 1xRTT communication over the 1xRTT carrier.

19. The terminal of claim 15, wherein the processor is further configured to initiate a 1xRTT packet hand-over request in order to transfer packet data communications from a HDR carrier to a 1xRTT carrier, or to transfer packet data communications from a 1xRTT carrier to a HDR carrier.

20. The terminal of claim 15, wherein the 1xRTT communication is at least one of the following:

- (a) a voice communication;
- (b) a SMS communication; and
- (c) a broadcast information communication.

21. A wireless communications network, comprising:
a 1xRTT carrier configured to carry 1xRTT communications and packet data communications;
a HDR carrier configured to carry packet data communications; and
a plurality of terminals configured to tune to the HDR carrier for establishing packet data communications and to tune to the 1xRTT carrier for establishing 1xRTT communications or packet data communications.

22. The network of claim 18, wherein each terminal is further configured to initiate a 1xRTT packet hand-over request in order to transfer packet data communications from a HDR carrier to a 1xRTT carrier, or to transfer packet data communications from a 1xRTT carrier to a HDR carrier.

23. The network of claim 19, wherein each hand-over request will contain information about a target BSC associated with the 1xRTT or HDR carrier that is the target of the hand-over.

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